

IN THE CLAIMS:

Please amend the claims as indicated below:

1. (Currently Amended) A method for synthesizing speech, comprising:  
5 generating a pitch contour for said synthesized speech; and  
enhancing the natural sound of concatenated synthesized speech segments  
by increasing an amount of energy in low frequency components of said pitch contour.
2. (Original) The method of claim 1, wherein said low frequency  
10 components are below approximately 10 Hz.
3. (Original) The method of claim 1, further comprising the step of  
interpolating discrete pitch values to generate said pitch contour.
- 15 4. (Original) The method of claim 1, wherein said increasing step further  
comprises the step of adding band limited noise to said pitch contour.
5. (Original) The method of claim 4, wherein said band limited noise is  
comprised of one or more sinusoidal components.  
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6. (Original) The method of claim 4, wherein said band limited noise may be  
expressed as  $a \times \sin(\varpi t + \Phi)$ , where  $a$  is the amplitude of the pitch variation,  $\varpi = 2\pi f_r$ ;  
and  $f_r$  is the rate of pitch variation.
- 25 7. (Original) The method of claim 1, wherein said increasing step further  
comprises the step of filtering said pitch contour with an impulse response filter having a  
pole at a desired low frequency value.
8. (Original) The method of claim 1, wherein said increasing step serves to  
30 add vibrato to said pitch contour.

9. (Original) The method of claim 1, wherein said pitch contour comprises a pitch value associated with each syllable of said speech.
10. (Currently Amended) A method for synthesizing speech, comprising:  
5 generating a pitch contour for said synthesized speech; and  
enhancing the natural sound of concatenated synthesized speech segments  
by adding band limited noise to said pitch contour.
11. (Original) The method of claim 10, wherein said band limited noise is  
10 added only to low frequency components below approximately 10 Hz.
12. (Original) The method of claim 10, further comprising the step of interpolating discrete pitch values to generate said pitch contour.
- 15 13. (Original) The method of claim 10, wherein said band limited noise is comprised of one or more sinusoidal components.
14. (Original) The method of claim 10, wherein said band limited noise may  
be expressed as  $a \times \sin(\varpi t + \Phi)$ , where  $a$  is the amplitude of the pitch variation,  $\varpi = 2\pi$   
20  $f_r$ ; and  $f_r$  is the rate of pitch variation.
15. (Original) The method of claim 10, wherein said adding step serves to add vibrato to said pitch contour.
- 25 16. (Original) The method of claim 10, wherein said pitch contour comprises a pitch value associated with each syllable of said speech.
17. (Currently Amended) A method for synthesizing speech, comprising:  
generating a pitch contour for said synthesized speech; and

enhancing the natural sound of concatenated synthesized speech segments  
by filtering said pitch contour with an impulse response filter having a pole at a desired  
low frequency value.

5 18. (Original) The method of claim 17, wherein low frequency value is below  
approximately 10 Hz.

19. (Original) The method of claim 17, further comprising the step of  
interpolating discrete pitch values to generate said pitch contour.

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20. (Original) The method of claim 17, wherein said increasing step serves to  
add vibrato to said pitch contour.

21. (Original) The method of claim 17, wherein said pitch contour comprises a  
15 pitch value associated with each syllable of said speech.

22. (Currently Amended) A speech synthesizer, comprising:  
a pitch predictor that generates a pitch contour for said synthesized  
speech; and

20 a low frequency energy booster to enhance the natural sound of  
concatenated synthesized speech segments by increasing ~~increase~~ an amount of energy in  
low frequency components of said pitch contour.

23. (Original) The speech synthesizer of claim 22, wherein said low frequency  
25 energy booster adds band limited noise to said pitch contour.

24. (Original) The speech synthesizer of claim 22, wherein said low frequency  
energy booster filters said pitch contour with an impulse response filter having a pole at a  
desired low frequency value.

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